

Abstract

The invention relates to a galvanosorptive reaction cell with closed substance circulation for the conversion of low temperature heat, preferable of waste heat into useful electrical work. The reaction cell and the accompanying isobaric substance circuit are presented. The galvanosorptive reaction process inside the cell is carried out polytropically with an electrostatic auxiliary voltage, which is superimposed onto the inherent voltage of the cell. Therefore, not only free reaction work can be extracted from the reaction system, but by cooling of the reaction system also substance-bound reaction work. The electrical energy yield and the power density of galvanosorptive reaction cell are thereby increased many times over.